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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,169	08/21/2001	Larry A. Druga	114302.1721	6443

30734 7590 04/18/2003

BAKER + HOSTETLER LLP
WASHINGTON SQUARE, SUITE 1100
1050 CONNECTICUT AVE. N.W.
WASHINGTON, DC 20036-5304

EXAMINER	
CECIL, TERRY K	
ART UNIT	**PAPER NUMBER**
1723	

DATE MAILED: 04/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/933,169	DRUGA, LARRY A.	
	Examiner	Art Unit	
	Mr. Terry K. Cecil	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *13 and 14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 15-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *10 March 2003* is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-12 and 15-20 in Paper No. 4 is acknowledged. The traversal is on the grounds that the searching of both inventions would not be a series burden to the examiner. This is not found persuasive because of the reasons listed in section 3 of the prior office action: "Restriction for examination purposes is proper...because (i) they have acquired a separate status in the art as shown by their different classification, (ii) the search required for the respective groups is not necessarily required by each of the other groups, and (iii) their subject matter is recognized as divergent. Further, it is pointed out that apparatuses for filtering and methods for filtering are separately classified such that the searches of the separate inventions are not coextensive. For this reason and for other reasons listed above, the examiner contends that a search of both inventions together would be a serious burden to the examiner and that the restriction requirement of the prior office action is proper and is made FINAL.

Drawings

In view of applicant's drawing change to figure 4 and his submission of a copy of figure 3, the drawing objections of the prior office action are withdrawn.

Claim Rejections - 35 USC ' 112

Because of applicant's amendments to the claims, the 112 rejections of the prior office action have been obviated.

Claim Rejections - 35 USC ' 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper (U.S. 3,996,137). Cooper discloses a fluid filter that clearly anticipates claims 3 and 4. The bottom of figure 2 thereof is reproduced on the next page.

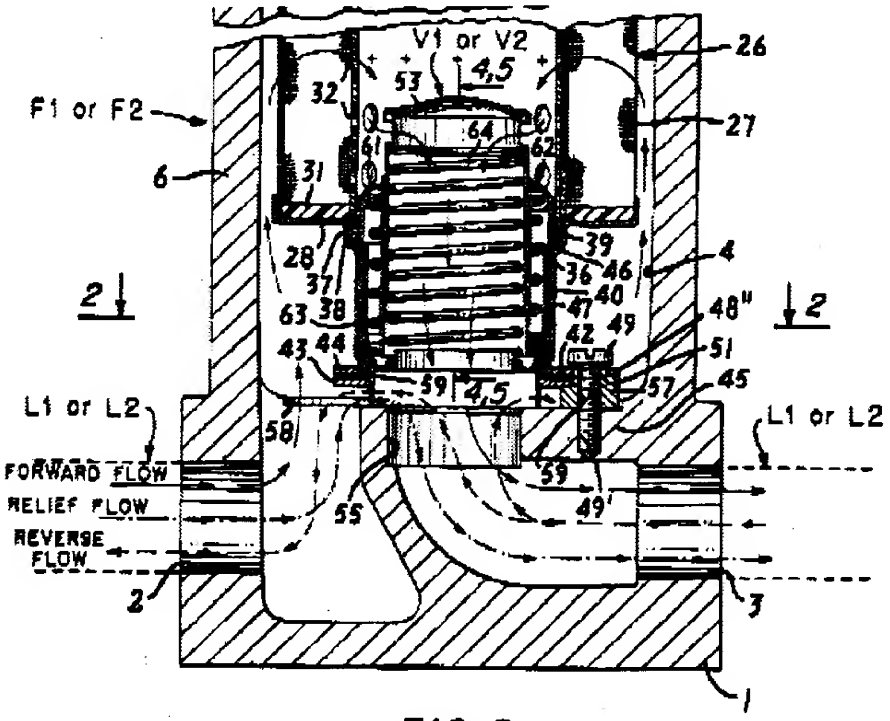
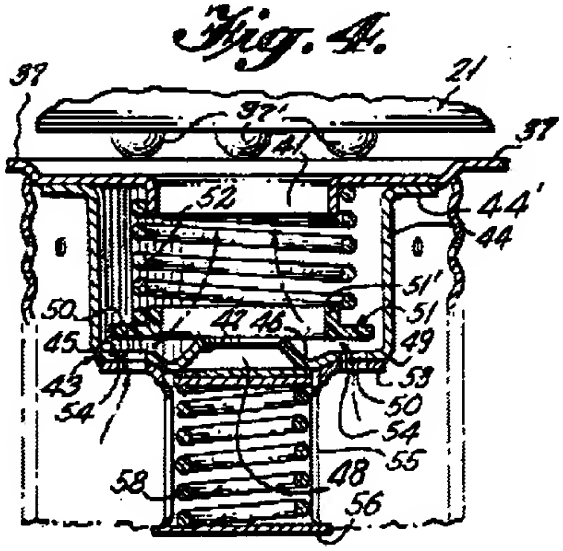


FIG. 2

The first, second, third fluid flows and the arrows thereof are shown above as the forward flow, relief flow, and reverse flow, respectively [as in claim 3], wherein the first flow path includes the inlet 2, the space between the filter element 27 and the housing 6, the filter element, a central passage 35, and the outlet 3 [as in claim 4].

Applicant has stated that "Hultgren" inadvertently cited in the rejection herebelow of the prior office action should have been "Humbert" and has responded to the prior action as such. The examiner confirms this as evidenced by figure 4 of Humbert that was reproduced in the prior action and the inclusion of "Humbert" referenced in the "Notice of References Cited" of the prior action.

4. Claims 1-9, 11-12 and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by *Humbert* (U.S. 3,456,800). As shown in figure 4 reproduced below, Humbert clearly anticipates claim 1.



As shown above, Humbert discloses a first retainer 44 (or alternately 37 and attached wall 34), a first spring, a first disk 51, a second retainer 55, a second spring, and a second disk 57 (see figure 2), wherein the disks are operative to compress in opposite directions toward their respective retainers [as in claim 1].

In addition, as shown in figure 1, Humbert teaches the aforementioned dual direction bypass valve in combination with a filter 33 having an inlet and an outlet (12 or 13) and an end cap

separating the first and second disks (bottom portion 45 can be viewed an end cap between disks 51 and 57 and the retainer—37 and attached wall 34) [as in claim 2].

Humbert also discloses a first fluid flow path (shown in figure 1), a second fluid flow path allowing a forward flow bypass means (shown in figure 2); and a third fluid flow path allowing a reverse flow bypass means (shown in figure 4) wherein the reverse flow bypass means is disposed adjacent the forward flow bypass means [as in claim 3].

As shown in figure 1, in the first fluid flow path, fluid entering inlet 12 flows through apertures 32 in the first retainer (37 with attached wall 34) into a space between the filter element 33 and wall 34 (which is also between the filter media and an interior face of a central wall of the chamber), through the filter media 33 into a central passage and out the outlet 13 [as in claims 4 and 5], wherein the spring 30 is considered a stabilizing spring that is disposed between the first retainer and the housing which results in holding the first retainer in place [as in claim 11].

As shown in figure 4, Humbert also discloses the reverse flow bypass means to include a first disk 51 against a plurality of peripheral holes 50 in the end cap 45 operable to open toward the first retainer means (37) for fluid to bypass the media [as in claim 6].

As shown in figure 2, Humbert also discloses the forward bypass means to include a second disk 57 against a central opening 48 in the end cap 45 operable to open toward the second retainer means 55 to bypass the filter media [as in claim 7], wherein the forward flow bypass means (the second fluid flow path) leads through the front valve body (that includes 44) and through the rear valve body (that includes 55) to the outlet 13 [as in claim 8] and the reverse bypass means (third

flow path) leads from outlet 13 through the central passage, front valve body (via holes 50) to bypass the rear valve body (including 55) and the media [as in claim 9].

As for claims 12 and 15-18, Humbert, as expanded above, anticipates all the limitations thereof.

As for claims 19 and 20, the drawing symbol for disk 51 (alternating diagonal thin and thick lines) indicates the disk is made of plastic [as in claim 19] and the drawing symbol for the retainer, spring and end cap (diagonal thin lines) indicates the elements are made of metal. See MPEP 608.02.

Claim Rejections - 35 USC ' 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

> Determining the scope and contents of the prior art.
> Ascertaining the differences between the prior art and the claims at issue.
> Resolving the level of ordinary skill in the pertinent art.
> Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Gizowski (U.S. 6,139,737). Cooper has been expanded above and teaches all the limitations

of claim 3. Claim 10 has the limitation of a magnet positioned around a side wall of an interior face of the chamber, which attracts and retains magnetically susceptible particles in the fluid. Gizowski teaches such a magnet: 18 of figure 2. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the magnetic of Gizowski in the filter of Cooper since Gizowski teaches the benefit of removing metal particles that may damage mechanical components of a vehicle (col. 1). Such a benefit is also desired by Cooper (col. 1, lines 55-62). Since fluid in both prior art references flows between the housing and the filter element before being filtered, such a structural modification is possible.

Response to Arguments

7. Applicant's arguments filed 3-10-2003 have been fully considered but are unpersuasive. Applicant's sole argument is that the claims are not anticipated by Humbert and Copper because of the location of their filter medias in relation to their respective outlets and inlets. This is not found persuasive because of the following reasons:

- Initially, it is pointed out that claim 1 does not include an inlet or an outlet and it is not seen how applicant's argument applies thereto. This claim is anticipated by Humbert.
- With respect to claims 3 and 4, the applicant argues (page 9) that the claims are not anticipated by Cooper since Cooper does not teach "a filter media disposed in said chamber between said inlet and said outlet for filtering the fluid" However, the examiner contends that such is taught by Cooper as follows: as shown in figure 2, the chamber (the entire space defined by housing elements 1, 6 and 9) includes a filter element 27 and lies between ports 2 and 3 such that fluid flowing through either port 2 or 3 and into the chamber flows through the filter element and out the other port. The filter element does lie between the ports. Did applicant intend to

claim "a filter element having a central axis and positioned within the chamber defined by a housing; and an inlet and an outlet coaxially-arranged with said filter element and positioned on opposite ends of said housing"? Such is not currently required by the claims.

- With respect to independent claims 2, 3 and 15, the applicant argues that Humbert does not teach a "filter media disposed in said chamber between said inlet and said outlet" but teaches rather a filter located adjacent the inlet and outlet. However, as similarly explained above, the chamber defined by the housing and filter therein does lie between inlet and outlet ports 12, 13. Did applicant intend to claim the coaxial arrangement mentioned in the bullet above? Such has not been claimed.

- With respect to independent claim 12, the applicant has argued (page 10) that Humbert does not teach a "chamber having an inlet at one end and an outlet at another end" such that they are considered located on opposite ends of the chamber. Initially, it is pointed out that "opposite ends" does not appear in the claim. In Humbert, in a first flow path, fluid flows into port 12, through the filter element, and out through port 13. The *chamber* (a space) includes "a first end" at the beginning of the first flow path (port 12) and "another end" at the end of the first flow path (port 13) and includes the filter element therebetween. Claim 12, does not require inlet and outlet *housing* ports that are coaxially arranged with the filter element and on opposite ends of the *housing*.

- It is presented that the essence of applicant's invention as disclosed in the specification is a bi-directional valve for a filter that allows a bypass flow around the filter when the filter is clogged even if the filter is put in backwards (i.e. the inlet is used an the outlet and vice versa). However, such is taught in both the primary references, Humbert and Cooper, as described in

their respective disclosures. In view of applicant's disclosure in the last two paragraphs on page 4 of the specification, the examiner contends that it was not the applicant's intention for the claims—as originally presented—to limit the *arrangement* of the inlet and the outlet with respect to the filter to be on opposite sides of the filter and on opposites ends of the *housing* (see lines 14 and 22 of page 4).

- If applicant intends to amendment the claims to require the aforementioned coaxial arrangement (in the second bullet above), the examiner points out that such is known in the art of McDuffie (U.S. 3,799,347) and Bethel (U.S. 4,318,809), copies of which are included herewith.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (703)305-0079 for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:00a to 4:30p, on at least four days during the week M-F.
- The group receptionist can be reached at (703)308-0661 for inquiries of a general nature or those relating to the status of this or proceeding applications.
- Wanda Walker, the examiner's supervisor, can be reached at (703)308-0457 if attempts to reach the examiner are unsuccessful.
- Fax numbers for this art unit are as follows:

  i. (703)872-9310 for *official* faxes (i.e. faxes to be entered as part of the file history) that are not after-final; and

  ii. (703)872-9311 if after-final.

JOSEPH DRODGE
PRIMARY EXAMINER

TKC
April 16, 2003